# SONY®

UHF Synthesized Transmitter
WRT-8B

The WRT-8B Body-pack Transmitter is the latest addition to the extensive range of Sony UHF synthesized wireless microphone systems. Extremely compact and lightweight, essential qualities for use by artists in fast-moving TV and theater musical productions, this new model is just 63 mm x 83 mm x 17 mm (W x H x D) and weighs a mere 140 g - including batteries. Inside its tough, die-cast magnesium body is a highly stable, lownoise transmitter providing superb audio quality. It can operate for up to 13 hours on two AA-size batteries\*, and features switchable AF input and RF output levels, a variable input attenuator, and easy-toread indicators.

As well as theater and studio use, the WRT-8B has the functionality and rugged construction that makes it ideal for the demanding environments of news gathering, documentary production and sports events.

\* The time may vary depending on the operating conditions.



# **Features**

#### **Stable Transmission**

A Phase Locked Loop (PLL) frequency synthesized system is the core technology used in the WRT-8B to achieve its outstanding carrier stability, an essential performance factor in professional wireless microphone systems. This PLL-controlled system generates a highly stable carrier frequency, which can be selected in increments of 125 kHz. Users may choose from 102 frequencies with the WRT-8B AU model, and from 188 frequencies with the WRT-8B U model.

The WRT-8B also transmits a 32 kHz tone signal along with the program audio signal. This tone is recognized by the squelch circuit in Sony wireless microphone receivers so that the program signal is only output when this tone signal is received. This eliminates the output of undesired signals and noise from other equipment, as well as RF noise and popping when the transmitter is powered on or off.

#### Selectable RF output level

The WRT-8B provides a choice of RF output powers. The 10 mW output is suitable for multi-channel operations such as in theater and studio productions, while the 50 mW output is intended for the long-distance transmissions typically required for sports and news coverage.

## Switchable input level and variable attenuator

The audio input level is selectable to either MIC or LINE level with a switch on the side panel of the WRT-8B. A variable attenuator is located on the top panel.

## Long operating time

This compact transmitter operates continuously for approximately 13\* hours on two AA-size alkaline batteries at 10 mW output power. When operating at 50 mW, it can operate continuously for approximately six\* hours.

\*These times may vary depending on the operational environment.

## LCD and LED indicators

An easy-to-read LCD indicates extensive information such as operating channel/frequency, AF input level, RF output level, transmitter battery status and accumulated operating time. A red LED indicator also flashes when the AF level exceeds a designated level.

# **Battery alarm indicators**

As well as indicating battery status with the LCD indicator, a "low battery warning" is transmitted which can be monitored by most Sony receivers\*. In these receivers, a red LED starts flashing approximately one hour\*\* before the transmitter's battery will be exhausted.

\*WRR-810A, WRR-855A, WRR-855B receivers cannot receive the low battery warning.

\*\*This may vary depending on the operational environment.

## Rugged, die-cast magnesium, construction

## Lavalier microphone capability

The WRT-8B accepts the output of a variety of professional lavalier microphones fitted with an SMC9-4P connector, such as the Sony ECM-77BC, ECM-44BC, ECM-166BC, ECM-310BC, and ECM-350BC.

# **Specifications**

Oscillator:	Crystal-controlled PLL synthesizer
Carrier frequencies:	AU model; 792 MHz to 806 MHz (TV channels 66 to 67) Users may choose from 102 frequencies. U model; 758 MHz to 782 MHz (TV channels 62 to 65) or 782 MHz to 806 MHz (TV channels 66 to 69) Users may choose from 188 frequencies on each model.
RF power output:	50 mW/10 mW (e.r.p.) selectable
Frequency response:	40 Hz to 20 kHz (typical)
Tone signal:	32.768 kHz
Type of antenna:	1/4 wave length wire (SMA-J type connector)
Reference deviation:	±5 kHz (-60 dBV, 1 kHz input, MIC position) ±5 kHz (-20 dBu, 1 kHz input, LINE position)
Signal-to-noise ratio:	60 dB or more (A-weighted)
Attenuator adjustment range:	0 to 40 dB, continuous
Max. input level:	-2 dBV (1 kHz input, MIC position) +38 dBu (1 kHz input, LINE position)
Input level:	MIC level/LINE level switchable
Input connector:	Sony SMC9-4S type
Power requirements:	DC 3.0 V (with two LR6 alkaline batteries)
Battery life:	Approx. 6 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 50 mW output Approx. 13 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 10 mW output
Dimensions (W x H x D):	63 x 83 x 17 mm (2 1/2 x 3 3/8 x 11/16 inches)
Mass:	Approx. 140 g (4.9 oz) including batteries
Supplied accessories:	Soft case (x 1), spare battery case (x 1), microphone cable (x 1), operation manual (x 1)

# **Dimensions**



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